What is claimed is:

1.   A method for targeting virtual advertisements to terminals, comprising:

         assigning at least one virtual advertisement spot to a program;

         assigning one or more virtual objects to the at least one virtual advertisement spot;

         generating a retrieval plan, wherein the retrieval plan instructs one or more of the terminals to select one of the one or more virtual objects.

2.   The method of claim 1, wherein generating the retrieval plan comprises:

         assigning one or more of the terminals to one or more groups;

         designating a unique group mask for one or more of the groups; and

         assigning one or more of the groups to one of the virtual objects wherein the group mask indicates which terminals display a virtual object.

3.   The method of claim 2, wherein a group assignment and a corresponding group mask are stored in a memory of a terminal.

4.   The method of claim 2, wherein the group assignments are determined based on one or more of Area of Dominant Influence (ADI), zip code+4, demographic data and programs watched data, virtual objects viewed, on-screen questionnaires and characteristics imported from marketing databases, the group assignments being updated to reflect changes in the ADI, zip code+4, demographic data, programs watched data, virtual objects viewed, on-screen questionnaires, and characteristics imported from marketing databases.

5.   The method of claim 1, wherein the retrieval plan is sent periodically to the plurality of terminals, the retrieval plan being stored in a memory of one or more of the plurality of terminals.

1   6.   A method of targeting virtual objects, comprising:

2   providing a program containing one or more virtual object locations;

3   providing virtual objects for one or more of the virtual object locations;

4   providing at least one alternate virtual object for at least one of the one or more virtual

5 object locations; and

6   providing a retrieval plan, wherein the retrieval plan designates which of the one or

7 more virtual object locations displays an alternate virtual object.

8   7.   The method of claim 6, wherein the program is a television program.

9   8.   The method of claim 6, wherein the program is one of an advertisement, an electronic

10 program guide, and an Internet web page.

11   9.   The method of claim 6, wherein at least one of the virtual object locations is fixed in

12 position across frames of the program.

13   10.   The method of claim 6, wherein at least one of the virtual object locations moves

14 spatially in the program with time.

15   11.   The method of claim 6, wherein at least one of the virtual objects is interactive.

16   12.   The method of claim 6, wherein the program is broadcast to television terminals in a

17 television delivery system, further comprising:

18   creating categories of virtual objects and content;

19   defining group categories;

20   for one or more defined group categories, defining at least one group;

21   assigning one or more television terminals, for the one or more group categories, to

22 the at least one group;

1   creating a group assignment matrix based on the categories of the virtual objects, the

2   group categories and the group assignments;

3   storing the group assignment matrix in the one or more television terminals;

4   and

5   comparing the retrieval plan to the group assignment matrix to determine virtual

6   objects to display in the one or more virtual object locations.

7   13.   The method of claim 12, further comprising generating the retrieval plan,

8   comprising:

9   assigning the virtual objects to the one or more virtual object locations;

10   assigning the alternate virtual objects to at least one of the one or more virtual object

11   locations;

12   assigning a group to one or more of the virtual objects and the alternate virtual objects;

13   and

14   creating a group mask assignment, wherein the group mask assignment is used by the

15   television terminals to compare the retrieval plan to the group assignment matrix.

16   14.   The method of claim 13, wherein assigning the group to each of the default virtual

17   objects and the alternate virtual objects, comprises:

18   ranking one or more of programs based on categories of targeted virtual objects and

19   a first percentage of total viewers who view one or more of the programs;

20   ranking of targeted virtual objects based on a second percentage of total viewers;

21   determining, for the one or more ranked programs and the targeting categories,

22   targeted virtual objects with overall highest rankings, based on the first and the second

23   percentages;

24   assigning targeted virtual objects with the overall highest rankings to be displayed as
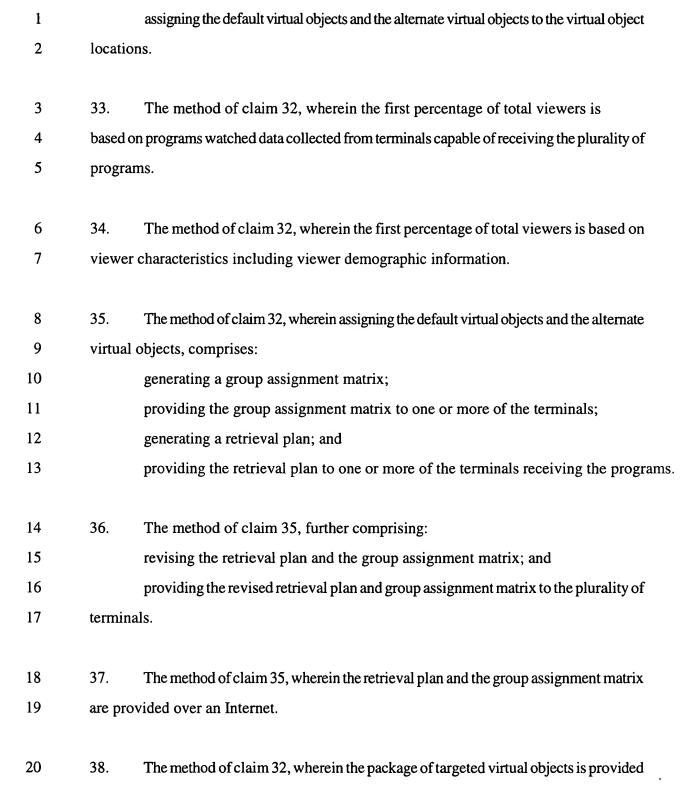
25   the virtual objects; and

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1   assigning targeted advertisements with lower overall rankings to be displayed as the

2 alternate virtual objects.

3   15.   The method of claim 13, wherein groups are defined based on characteristics of

4 viewers.

5   16.   The method of claim 15, wherein the characteristics include viewer demographic

6 information.

7   17.   The method of claim 15, wherein the characteristics include viewer entered

8 information.

9   18.   The method of claim 15, wherein the characteristics include programs watched data.

10   19.   The method of claim 15, wherein the characteristics include virtual objects watched

11 data.

12   20.   The method of claim 15, wherein one or more of the virtual object locations contain

13 an interactive virtual object, and wherein the characteristics include viewer activation of the

14 interactive virtual object.

15   21.   The method of claim 12, wherein the television terminal is a set top terminal.

16   22.   The method of claim 12, wherein the television terminal is incorporated into one of a

17 television, a personal computer and a PDA with video viewing capabilities.

18   23.   The method of claim 12, wherein the television terminal is coupled to a
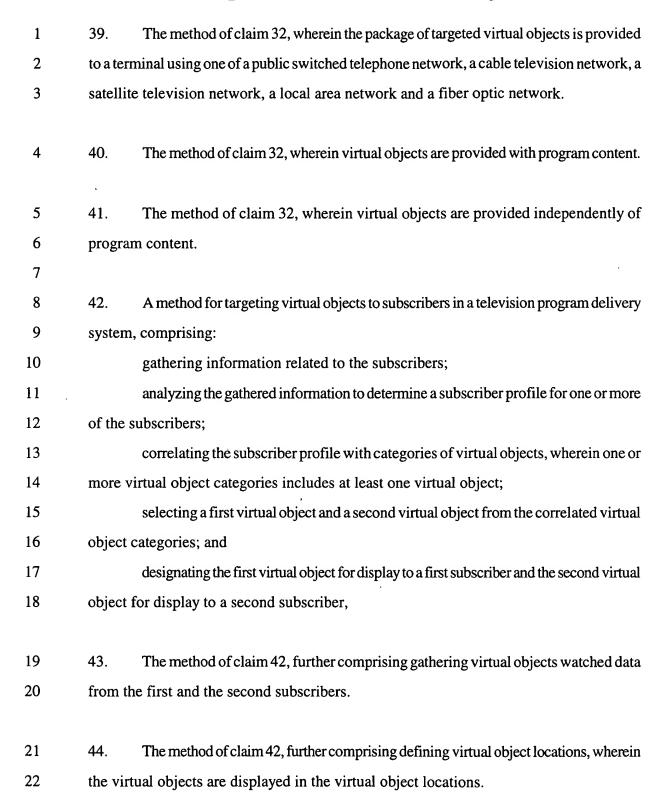
19 satellite television receiver.

1   24.   The method of claim 12, further comprising:

2   at one or more of the one or more television terminals, recording in a memory an

3   identification of a virtual object displayed in a virtual object location;

4   providing the identification to a remote site; and

5   deleting the identification from the memory.

6   25.   The method of claim 12, wherein the retrieval plan is provided with the

7   transmission of the program and periodically to one or more of the one or more television

8   terminals, the one or more television terminals storing the retrieval plan in a memory.

9   26.   A method of targeting virtual objects to terminals,

10   comprising:

11   creating a package of targeted virtual objects;

12   providing the package to one or more of the terminals;

13   generating a group assignment matrix;

14   providing the group assignment matrix to one or more of the terminals;

15   generating a retrieval plan;

16   providing the retrieval plan to one or more of the terminals; and

17   providing a program to one or more of the terminals, the program including at least

18   one virtual object location.

19   27.   The method of claim 26, further comprising at one or more of the terminals receiving

20   the program, retrieving one of the targeted virtual objects for display in the at least one virtual

21   object location.

22   28.   The method of claim 27, wherein the retrieval step, comprises:

23   comparing the group assignment matrix to the retrieval plan; and

24   selecting a virtual object for display based on the comparison.

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1   29.   The method of claim 26, further comprising:

2   storing in a terminal memory an identification of the virtual object displayed in the at

3   least one virtual object location;

4   providing the identification to a remote site; and

5   deleting the identification from the memory.

6   30.   The method of claim 26, wherein one or more of at least one virtual object locations

7   contains an interactive virtual object, further comprising:

8   receiving a selection of the interactive virtual object; and

9   linking a terminal selecting the interactive virtual object to an alternate program.

10   31.   The method of claim 30, wherein the alternative program comprises an Internet web

11   site.

12   32.   A method for assigning targeted virtual objects to virtual object locations in one or

13   more programs, comprising:

14   identifying the one or more programs to carry the targeted virtual objects;

15   assigning the targeted virtual objects to target categories;

16   dividing one or more target categories into groups of viewers;

17   ranking one or more of the programs based on the target categories and a first

18   percentage of total viewers in one or more groups of viewers;

19   ranking the targeted virtual objects based on a second percentage of total viewers in

20   one or more groups of viewers;

21   determining, for one or more of the programs and one or more of the targeting

22   categories, targeted virtual objects with overall highest rankings, based on the first and the

23   second percentages;

24   assigning one or more targeted virtual objects as default virtual objects;

25   assigning one or more targeted virtual objects as alternate virtual objects; and

1   assigning the default virtual objects and the alternate virtual objects to the virtual object

2   locations.

3   33.   The method of claim 32, wherein the first percentage of total viewers is

4   based on programs watched data collected from terminals capable of receiving the plurality of

5   programs.

6   34.   The method of claim 32, wherein the first percentage of total viewers is based on

7   viewer characteristics including viewer demographic information.

8   35.   The method of claim 32, wherein assigning the default virtual objects and the alternate

9   virtual objects, comprises:

10   generating a group assignment matrix;

11   providing the group assignment matrix to one or more of the terminals;

12   generating a retrieval plan; and

13   providing the retrieval plan to one or more of the terminals receiving the programs.

14   36.   The method of claim 35, further comprising:

15   revising the retrieval plan and the group assignment matrix; and

16   providing the revised retrieval plan and group assignment matrix to the plurality of

17   terminals.

18   37.   The method of claim 35, wherein the retrieval plan and the group assignment matrix

19   are provided over an Internet.

20   38.   The method of claim 32, wherein the package of targeted virtual objects is provided

21   to a terminal over an Internet.

1   39.   The method of claim 32, wherein the package of targeted virtual objects is provided

2   to a terminal using one of a public switched telephone network, a cable television network, a

3   satellite television network, a local area network and a fiber optic network.

4   40.   The method of claim 32, wherein virtual objects are provided with program content.

5   41.   The method of claim 32, wherein virtual objects are provided independently of

6   program content.

7

8   42.   A method for targeting virtual objects to subscribers in a television program delivery

9   system, comprising:

10   gathering information related to the subscribers;

11   analyzing the gathered information to determine a subscriber profile for one or more

12   of the subscribers;

13   correlating the subscriber profile with categories of virtual objects, wherein one or

14   more virtual object categories includes at least one virtual object;

15   selecting a first virtual object and a second virtual object from the correlated virtual

16   object categories; and

17   designating the first virtual object for display to a first subscriber and the second virtual

18   object for display to a second subscriber,

19   43.   The method of claim 42, further comprising gathering virtual objects watched data

20   from the first and the second subscribers.

21   44.   The method of claim 42, further comprising defining virtual object locations, wherein

22   the virtual objects are displayed in the virtual object locations.

1   45.   The method of claim 44, wherein the virtual object locations are defined in a television

2   program.

3   46.   The method of claim 44, wherein the virtual object locations are defined in an

4   advertisement provided over a television delivery system.

5   47.   An apparatus that targets virtual objects for display at viewer reception sites,

6   comprising:

7   a virtual object location identifier that identifies virtual object locations in a

8   video;

9   a virtual object selector coupled to the virtual object location identifier that selects one

10   or more virtual objects to display in one or more of the identified virtual object locations; and

11   a targeted virtual object manager coupled to the virtual object selector, wherein the

12   targeted virtual object manager determines virtual objects from the selected one or more virtual

13   objects to be displayed in one or more of the virtual object locations.

14   48.   The apparatus of claim 47, wherein the determined virtual objects are determined

15   based on a personal profile of a viewer of the reception site, and wherein the personal profile

16   is stored in a memory of the reception site.

17   49.   The apparatus of claim 47, wherein the determined virtual objects are determined

18   based on a profile of a group of viewers of the reception sites, and wherein the personal profile

19   is stored in a memories of the reception sites.

20   50.   The apparatus of claim 49, wherein one or more of the reception sites comprises a

21   processor, the processor executing a routine to map one or more of the reception sites to the

22   group of viewers based on one or more of programs watched data, virtual objects viewed data

23   and other viewer data collected and stored at the one or more reception sites.

1   51.   A routine, executable on a general purpose computer, for targeting virtual objects to

2   an individual viewer and to groups of viewers, the routine, comprising:

3   a group definition routine that determines target categories of viewer characteristics;

4   a group assignment routine that assigns individual viewer terminals a group number for

5   each of the target categories;

6   a virtual object location routine that determines available virtual object locations in a

7   program; and

8   a retrieval plan generator that generates a plan for retrieving one or more virtual

9   objects for display in one or more of the available virtual object locations, wherein the plan is

10   generated based on the group number.

11   52.   A method for targeting virtual objects to viewers, comprising:

12   recognizing a virtual object location in a program;

13   receiving one or more virtual objects; and

14   generating a retrieval plan that instructs viewers' terminals to insert one or more of the

15   virtual objects into one or more of the virtual object locations.

16   53.   A method for targeting virtual objects to locations in a program, comprising:

17   identifying virtual objects for insertion into one or more of the locations; and

18   providing one or more of the identified virtual objects for insertion based on an

19   identity of a terminal that displays the program.

20   54.   A method for targeting virtual objects to terminals, comprising:

21   identifying the terminals based on characteristics of individual terminals and terminal

22   groups;

23   identifying virtual object locations in programs for display at the terminals; and

1   targeting the virtual objects for insertion into the virtual object locations based on the

2   identities of the terminals.

3   55.   The method of claim 54, further comprising displaying multiple virtual objects

4   simultaneously

5   56.   The method of claim 54, wherein one or more of the virtual objects are interactive

6   virtual objects, further comprising:

7   receiving a selection of one or more of the interactive virtual objects from one or more

8   of the terminals;

9   linking the selecting terminal to a remote location; and

10   displaying content from the remote location at the selecting terminal.

11   57.   The method of claim 56, wherein the remote location is an operations center and the

12   content is an additional program.

13   58.   The method of claim 56, wherein the remote location is an Internet web site and the

14   content is one or more web pages.